

# CATALYZING CLEAN ENERGY IN BANGLADESH PROGRAM ANNUAL PERFORMANCE REPORT

October 1, 2013 - September 30, 2014

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# CATALYZING CLEAN ENERGY IN BANGLADESH PROGRAM ANNUAL PERFORMANCE REPORT

OCTOBER 1, 2013 - SEPTEMBER 30, 2014

CATALYZING CLEAN ENERGY IN BANGLADESH (CCEB)
CONTRACT NUMBER: AID-388-C-13-00001
DELOITTE CONSULTING LLP
USAID/BANGLADESH ECONOMIC GROWTH OFFICE
DECEMBER 9, 2014

#### **DISCLAIMER:**

The author's views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government.

#### **ACRONYMS**

The following table provides a list and description of acronyms used in this report.

A 2112 121 122	Definition
Acronym	Definition
ADB	Asian Development Bank
AEE	Association of Energy Engineers
AOR	USAID Agreement Officers Representative
BEO	USAID Bureau Environmental Officer
BCSIR	Bangladesh Council of Scientific and Industrial Research
BERC	Bangladesh Energy Regulatory Commission
BPDB	Bangladesh Power Development Board
BREB	Bangladesh Rural Electrification Board
BUET	Bangladesh University of Engineering and Technology
CAP	Country Action Plan
CBL	City Bank Limited
CCEB	Catalyzing Clean Energy in Bangladesh
CDM	Clean Development Mechanism
CEA	Certified Energy Auditor
CEM	Certified Energy Manager
CSR	Corporate Social Responsibility
DESCO	Dhaka Electric Supply Company
DPDC	Dhaka Power Distribution Company
DOE	Department of Energy
DSM	Demand Side Management
DQA	Data Quality Assessment
EBL	Eastern Bank Limited
EC-LEDS	Enhancing Development for Low Emissions Development Strategies
EE	Energy Efficiency
EEIO	Energy Efficiency Improvement Option
EMMP	Environmental Mitigation and Monitoring Plan
EPA	Environmental Protection Agency
FHI360	FHI360 Organization
GACC	Global Alliance for Clean Cookstoves
GHG	Greenhouse Gas
GIZ	Deutsche Gesellschaft fur Internationale Zusammenarbeit GmbH
	(Germany)
GJ	Gigajoules
GOB	Government of Bangladesh
GTCL	Gas Transmission Company Limited
ICEA	USAID Improved Capacity for Energy Access Project
ICF	ICF Corporation
ICS	Improved Cookstoves
IDCOL	Infrastructure Development Company
IDLC	Industrial Development Leasing Company
	Information Education Communication/Behavior Change

IEC/BCC Communication

IIDFC Industrial and Infrastructure Development Finance Company

IFC International Finance Corporation

IFIC International Finance Investment and Commerce Bank

IG Investment Grade

IPP Independent Power Producer IPR Intellectual Property Rights

JBL Janata Bank Limited

JICA Japan International Cooperation Agency

LBFL LankaBangla Finance Limited

LEAD Low Emissions Asian Development
LEDS Low Emission Development Strategy

LOC Letter of Cooperation

M&E Monitoring and Evaluation

MFI Microfinance Financial Institution
MIS Management Information System

MOE Ministry of Education

MOPEMR Ministry of Power, Energy and Mineral Resources

MTBL Mutual Trust Bank Limited
NGO Non-Governmental Organization

PDB Power Development Board

PFAN Private Financing Advisory Network
PKSF Palli Karma Sahayak Foundation

PMEP Performance Monitoring and Evaluation Plan

PSPAM Power Sector Policy Analysis Model
PURC Public Utility Regulatory Commission

QC Quality Control

RFA Request for Application
SE4ALL Sustainable Energy for All
SME Small and Medium Enterprise
SMC Social Marketing Corporation
SOP Standard Operating Procedure

SOW Scope of Work

STTA Short Term Technical Assistance

SREDA Sustainable and Renewable Energy Development Authority

TA Technical Assistance
TBP Textile Best Practices
TOR Terms of Reference

TV Television

UNICEF The United Nations Children's Fund

ULCL United Finance Limited

USAID United States Agency for International Development

WT Walk Through

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#### **Executive Summary**

Contract number AID-388-C-13-00001 between the U.S. Agency for International Development (USAID) and Deloitte Consulting LLP became effective October 10, 2012 with concurrence to begin mobilization on November 4, 2012. The period of performance for this contract is the five-year period from the effective date of the award through October 9, 2017. This annual report covers the second year of implementation, October 1, 2013 through September 30, 2014, per Section F.3 of the Contract.

The Deloitte team completed the second year work plan deliverables, further advanced working relationships with project counterparts, and laid the foundation for achieving significant results and meeting and exceeding Performance Monitoring and Evaluation Plan (PMEP) targets. In summary:

<u>Task 1 – Improved Regulatory Environment</u>: The program focused on assisting the Bangladesh Energy Regulatory Commission (BERC) in meeting the targets outlined by the Maturity Model, as well as completing an end-of-year assessment of BERC's performance. BERC committed to capacity development initiatives, formed a working group for implementing e-docketing, adopted regulations for dispute settlement, commenced arbitration, and made its first award. BERC staff attended incountry and targeted overseas training and regulatory visits. CCEB (Catalyzing Clean Energy in Bangladesh) and BERC prepared regulations for conducting energy audits at generation facilities and addressing consumer complaints; CCEB and BERC also developed structures, Terms of Reference (TORs), and procedures for the legal department.

<u>Task 2 – Energy Policy</u>: With the consent of the Power Division, the Power Cell has been designated as the host organization for the GHG Data Repository and Power Sector Policy Analysis Model (PSPAM). Task 2 updated the data repository and PSPAM with additional data and scenarios with the assistance of various stakeholders including the Power Division, the Bangladesh Power Development Board (BPDB), the Bangladesh Rural Electrification Board (BREB), Independent Power Producers' (IPP) Cell and Petrobangla. In addition, CCEB organized trainings on Data Repository and PSPAM for the Power Cell as well as relevant stakeholders.

Task 3 – Industrial Energy Efficiency: CCEB conducted walk-through energy audits at 50 industrial facilities in the textile, steel re-rolling, and frozen foods sectors. CCEB completed investment grade energy audits at 20 of these facilities, which identified several energy efficiency improvement options (EEIOs) with a combined potential annual energy savings of 433,131 GJ. These were valued at \$1.62 million in annual savings and 38,794 MT annual carbon emissions. CCEB determined that creating awareness among the banking community about energy efficiency (EE) financing was a priority to help implement the EEIOs. A CCEB-prepared assessment report on nine financial institutions identified the opportunities and constraints in EE financing. CCEB also prepared an EE loan template for the participating financial institution. As an incentive for early EE project adopters, CCEB awarded \$260,000 to five textile plants in Tranche 1. An additional nine grant applicants may receive potential grant awards under Tranche 2. An Association of Energy Engineers (AEE) Bangladesh Chapter was established to promote future sustainable EE practices. AEE Bangladesh will train energy professionals and offer various services related to energy. CCEB held three workshops under this task, raising awareness among a broad range of stakeholders.

<u>Task 4 – Utility DSM</u>: CCEB placed demand side management (DSM) activities on hold until a revised roadmap is developed and approved. CCEB mobilized Grayson Heffner, Deloitte's in-house DSM specialist, to lead in this activity. The Deloitte team is discussing the revised roadmap with USAID; it will likely be approved in early year 3.

<u>Task 5 – Improved Cookstoves</u>: CCEB strives to create a vibrant Improved Cookstoves (ICS) market in Bangladesh, on both the demand and supply side. To this effect, CCEB organized and held events in year 2 including the Second Annual Market Facilitation Platform as well as various regional

workshops. Studies and behavior change communications materials prepared and distributed by CCEB sought to raise awareness on new ICS units and their benefits. On access to finance, CCEB organized a workshop on "Establishing Linkages between Entrepreneurs and MFIs," and helped entrepreneurs to connect with Private Financing Advisory Network (PFAN), Sustainable Energy for All (SE4ALL), and others. CCEB continued to assist GACC and the Power Division to develop an ICS national standard. Lastly, CCEB signed six Letters of Cooperation (LOCs) to achieve project milestones.

<u>Trainings and Workshops</u>: CCEB trained 504 people with its classes and workshops. The events included BERC in-house training, BERC exchange visits, an international training program on utility regulation and strategy, a GHG data repository training, a power sector screening tool training, EE workshops for frozen food and steel re-rolling plants, ICS regional workshops, a business development workshop, and a Market Facilitation Platform meeting.

<u>PMEP</u>: CCEB revised PMEP and submitted it to USAID for review and approval according to the Year 2 Work Plan and based on discussions with task leaders regarding indicator targets. Once approved, CCEB redesigned and upgraded the PMEP database to populate the indicator data and track results against the updated PMEP targets. Throughout year 2 the CCEB Monitoring and Evaluation (M&E) team collected data and information from task leaders and various other sources. The data was then recorded, compiled and analyzed for reporting.

In September 2014, USAID and ACME (a consulting firm selected by USAID) conducted a Data Quality Assessment (DQA). In CCEB briefed USAID and ACME on findings from the Year 1 DQA. In a follow up meeting, the ACME team collected data and supporting documentation to conduct the Year 2 DQA. CCEB also provided *ad hoc* supplemental information on indicator achievement to the DQA team, as requested. CCEB has not yet received the DQA Final Report.

CCEB provided a report on indicator achievements to USAID noting when CCEB missed or exceeded targets by more than 10%, including a justification. CCEB's M&E specialist joined GIS training and workshops organized by USAID, and CCEB also joined a meeting with USAID regarding the Environmental Monitoring and Mitigation Plan (EMMP).

<u>Gender and EMMP</u>: The gender and environmental compliance activities were completed in line with the project's established Gender Strategy and the approved EMMP.

<u>CCEB Web Page</u>: CCEB updated and regularly maintained the CCEB web page with current announcements, postings, and deliverables. In addition, CCEB established Facebook and LinkedIn pages to more widely promote CCEB's work.

<u>Expenditure Forecast</u>: The CCEB forecast is right on target: 30% of contract TA budget expended by September 20, 2014.

The Deloitte team is able to report that all major Year 2 deliverables have been completed, with the exception of the Task 3 Annual Report. Four of five core task areas and support tasks are well established and prepared to undertake the Year 3 Work Plan. As mentioned above, the Deloitte team is currently restructuring Task 4, with the revised roadmap pending acceptance by USAID.

The Deloitte team's key plans for next year will concentrate on continuing Year 2 activities in accordance with the Year 3 Work Plan, which has been submitted to and approved by USAID.

#### Project Discussion – Progress Under Each Task/Sub-Task

The purpose of the CCEB project is to support energy sector development for energy security, economic growth, and climate change mitigation. Over the next 5 years, CCEB will enhance the enabling environment, build capacity to design and implement supportive policies and regulations, and increase utilization of clean energy technologies for the energy sector to develop on a low-carbon trajectory. It will achieve these goals through a focus on reforming the energy enabling environment; promoting private sector investments in clean and renewable energy; building local capacity in EE and DSM; and, implementing a comprehensive clean cookstoves initiative in rural and energy-deficient parts of the country.

### Component A: Improve Enabling Environment for Low Emissions Development

#### Task 1: Improve Regulatory Environment for Clean Energy Development

In accordance with the approved Year 2 Work Plan, CCEB will both build BERC's institutional capacity, using steps as agreed by BERC in a Maturity Model, and build BERC's capacity for action. Year 2's activities built a platform for the implementation of subsequent Task 1 activities.

#### Year 2 Work Plan

#### **Year 2 Accomplishments**

#### 1.1 Building and Implementing BERC Maturity Model

CCEB will collaborate with BERC on performing an overall assessment of BERC's capacity and BERC's goals and to identify specific actions to reach those goals (the BERC Maturity Model)

CCEB assisted BERC in initiating recommended interventions in the priority areas defined in the Year 1 Maturity Model, including finalizing dispute settlement regulations. For BERC's review and action, CCEB developed regulations for the energy audit of generation facilities, including audit forms and handling electricity retail consumer complaints. BERC provisionally adopted these energy audit forms. BPDB performed energy audits of three plants and submitted the results to BERC. In addition to the above, CCEB developed a revised organizational structure for BERC that includes a newly formed legal department. BERC officials completed a CCEB-led regulatory training, based on a training plan developed in year 1. CCEB also provided BERC a final conceptual design for edocketing and a Management Information System (MIS), and BERC formed a working group for its implementation. **CCEB** assessed BERC's institutional capacity in its leadership and management, legal system, docketing system, and organizational development in year 2, using the Maturity Model scorecard. BERC improved from the 2.6 composite baseline score in year 1 to 3.5, with a goal of 4.6 in year 2 (the scorecard has a scale from 1 to 12). This is an 11% increase in total capacity when compared to leading energy regulator practices. It falls short of CCEB's 20% year 2 target. The final Year 2, Task 1 Report comprising these activities was completed and submitted to USAID.

#### 1.2 Initialize Reinforcement of BERC'S Case Docketing and Data Management System

CCEB will support the achievement of BERC's vision for an optimal case docketing and data management system. CCEB will baseline the current system and prepare the TOR for a desired system that best fits BERC's hardware and software needs.

CCEB refined future state assessments for tariff setting, licensing, consumer complaint handling, responding to legal proceeding and data management to improve efficiency and standards. CCEB's IT specialist assisted the BERC working group in the recommendation for implementing e docketing and prepared an EOI for engaging a software developer. However, e-docketing implementation remained incomplete in year 2 due to not being allocating a budget. Future state assessments are included in the final Year 2 Report.

#### 1.3 Strengthen BERC's Legal Capacity

As part of developing the Maturity Model. CCEB's legal specialist will work with BERC to carry out a number of activities. These include: (a) analyzing how a civil court operates, and how BERC operates currently, as required by the BERC Law; (b) discussing the requirements systematically address and develop necessary procedures, rules, other and materials for transitioning BERC to the standards of a civil court; and (c) developing a detailed plan of how to jointly carry out the necessary procedures, rules, and related tasks.

The CCEB regulatory expert confirmed that the BERC Act conveys to BERC the rights to act as a civil court would act in handling disputes. However, in order to carry out this mandate, CCEB concluded that BERC's legal capability needs strengthening. Based on these findings, CCEB prepared the organizational set up for the BERC Legal Department, and finalized its TOR and draft procedures for functioning. The Legal Department structure, with key position requirements, are included in the final Year 2 Report.

#### 1.4 Other

CCEB will arrange for the enrollment of one BERC staff member in the Winter 2014 PURC World Bank Group International Training on Utility Regulation and Strategy program, and one BERC staff in the 2014 PURC International Practices in Energy Pricing program. CCEB will also organize a regulatory tour for the regional regulatory commissions, to share knowledge in dispute adjudication proceedings and challenges in major regulatory issues such as power generation disaster management.

CCEB enrolled two BERC staff members in the winter and summer 2014 WB/PURC program and one BERC staff member in the 2014 PURC program. All BERC staff members completed these programs. Two BERC staff members attended the study tour to 3 regulatory commissions in India.

#### Task 2: Strengthen Analytical Capacity for Energy Planning and Policy Making

One of the fundamental building blocks of any Low Emission Development Strategy (LEDS) process is the capacity to model scenarios and analyze data, and then compare and contrast various development options. The resulting development option should reduce emissions without significantly restraining economic development.

There are opportunities to lower emissions associated with energy sector development. Identifying favorable options for energy sector development will require a greatly enhanced capacity to collect, model, and analyze information associated with the financial, economic, environmental, and social impacts of development.

During year 1, CCEB collected GHG emission data from all players in the power sector to establish a full GHG inventory, along with the processes and methodologies to maintain the inventory. In year 2, CCEB built on year 1 accomplishments by working with the Power Cell to establish standard operating procedures for maintaining inventory. CCEB developed an initial model for energy sector scenario planning in year 1, and, in year 2, continued working with the Government of Bangladesh (GOB) to model scenarios and analyze data.

#### Year 2 Work Plan

#### **Year 2 Accomplishments**

#### 2.1 GHG Emissions Data and Analysis

According to the Year 1 Work Plan, activities under this task allow CCEB to enhance the Government of Bangladesh's (GOB) and stakeholders' Bangladeshi technical and institutional capacity for GHG data collection and data analyses. This aims to improve their understanding of emission sources and emission reduction opportunities associated with energy sector development. In year 1, CCEB produced the following: a detailed GHG baseline report that describes the processes and methodologies to establish a power sector GHG inventory; the GHG inventory itself; and, a power plant database that classifies inputs in the database. CCEB will look, in year 2, to advance these accomplishments by establishing the processes and institutional arrangements conducive to the sustained population and use of the power sector emissions repository, amongst other related activities. A detailed report that CCEB plans for year 2 will document GOB's ability to collect, analyze, model and report GHG data, as well as identify pending GHG sources from year 1. Equipping the GOB to use and maintain this database will assist the drafting implementation of effective clean energy policies and programs.

**CCEB** completed the "Host Organization Selection" Report and the Power Division consented to the Power Cell's role as the host organization, with BPDB providing a supporting role. CCEB updated the GHG Data Repository with additional power plant fuel consumption and generation data— BPDB, BREB, the IPP Cell provided the data. Petrobangla provided fuel composition data from the field. CCEB conducted training on the GHG data repository in June 2014. with the participation of the Power Division, the Power Cell, BPDB, BREB, Petrobangla, and the Department of the Environment. The training aimed enhance the GOB's technical and institutional capacity for GHG data collection and analyses, and to improve the understanding of GHG emission sources and mitigation opportunities associated with the energy sector development. CCEB also prepared the Standard Operating Procedures (SOPs), consisting of two main sections, including: 1) a description of the data repository, including detailed instructions for updating the file, and 2) procedures to maintain it. The Power Cell will use the SOPs to manage the repository. Finally, the deliverables for these activities include the updated GHG data repository, the Host Organization Selection Report, data repository training, and the GHG repository SOPs.

#### 2.2 Energy Policy Analysis

Activities under this task enhance GOB and Bangladeshi stakeholder policy analysis and planning capacity for energy sector and low emission development. Additionally, they support analysis of power sector policy scenarios/clean energy targets and energy

CCEB obtained data and information on fuel prices and consumption from stakeholders including BPDB, the Power Cell, and Petrobangla. CCEB incorporated various fuel supply options in the Power Sector Policy Analyses Model (PSPAM). Additional scenarios added by CCEB were for

planning, so that future energy and climate change plans and policies can be more oriented towards reduced GHG emissions (i.e., the Bangladesh Climate Change Strategy and Action Plan or BCCSAP, national energy policy, and the energy component of the five-year plans). Whereas CCEB prepared an initial model in year 1, this technical assistance will enable GOB and stakeholders to model scenarios and analyze data, and use that analysis to select a low emission development option.

These activities directly support USAID and the U.S. government's commitment initiative on Enhancing Capacity for Low Emission Development Strategies (EC-LEDS) in Bangladesh.

increased cross-border imports, reduced demand due to EE interventions, increased off-grid solar, reduced system losses, and the possibility of biomass co-firing with coal. Addressing the views of BPDB, BREB, the Power Division and the Power Cell, the Task 2 team estimated and incorporated different load growth projections, fuel mixes, energy demand, and fuel and energy product prices into PSPAM. This allows users to analyze the impacts of a number of scenarios. CCEB organized PSPAM training on August 18, 2014 and the stakeholders mentioned participated. The training walked PSPAM users through analyzing different options for electricity generation in Bangladesh, and understanding the resulting effects of policy choices on metrics such as system costs, power prices, GHG emissions and fuel mix. The model provides Bangladesh policymakers with a transparent and easy-to-use analytical tool when studying various scenario options for generation planning and clean energy that meet energy needs with the lowest possible GHG emissions. The deliverables for the above activities are an updated PSPAM, the Energy Policymaking with PSPAM Report, PSPAM training and the Supplemental Employment and Economic Growth Report.

## Component B: Increased Energy Efficiency and Conservation

The gap between electricity supply and demand continues to increase in Bangladesh. Meeting the rising energy demand solely through increases in supply, and thus without DSM, is an expensive and infeasible solution. The efficient use of energy is therefore crucial to addressing the twin challenges of energy security and GHG emissions mitigation.

Recent studies by WBG and the German development agency, Deutsche Gesellschaft fur Internationale Zusammenarbeit GmbH (GIZ), have shown that significant, commercially viable opportunities exist for EE in Bangladesh, for which capital has not previously been available. Major barriers to these opportunities include the lack of access to financing (as commercial banks are not prepared to lend for EE), a lack of incentives for investment by end users, resulting from non-cost reflective electricity pricing, and a lack of information and awareness about EE technologies and the associated costs and benefits.

#### Task 3: Industrial Energy Efficiency Analysis and Adoption

There are opportunities to improve industrial EE in various sectors in Bangladesh. Assessments and implementation of cost-effective efficiency improvement, especially in energy-intensive industries, can lead to lower emissions and cost-effective savings. There is potential for the adoption and use of proven and innovative technologies.

EE opportunities are most apparent in medium-sized industries, where firms can use improved motors, pumps, and boilers, co-generate electricity, and improve industrial systems and processes. The returns on investment for these activities are favorable even under current electricity and natural gas pricing schemes. These activities can support long-term sustainability, through strengthening private and public sector capacity to develop EE projects, financing, and implementation, and through training of energy auditors, energy entrepreneurs and financial institutions.

In year 1, CCEB conducted 20 walk through audits at textile sector industries and selected eight of those for investment grade audits. This resulted in a documented potential energy savings of 282,000 GJ. CCEB, in year 2 of the project, supported these firms in implementing recommended EE interventions, while continuing to carry out walk through and investment grade audits at newly identified manufacturers in the textiles, steel re-rolling and frozen food sectors. Additionally, CCEB kicked-off its Incentive Funds program, which provides grants to qualified companies wishing to implement EE projects on a cost-share basis. Lastly, CCEB continues to promote the work of energy auditors and is now supporting the founding of an AEE chapter in Bangladesh.

#### Year 2 Work Plan

#### **Year 2 Accomplishments**

#### 3.1 Project Identification and Development

As highlighted above, CCEB carried out 20 walk through energy audits and eight investment grade audits for the textile sector in year 1. In year 2, CCEB will work with audited companies to develop the EE projects that they identified and analyzed, and promote the financing and implementation of those projects. In addition, CCEB will select two other industrial sectors (steel re-rolling and frozen foods) for EE project identification and development. This activity will continue to focus on privately owned, and export-oriented, small and medium enterprises (SMEs). To raise awareness among industry stakeholders, CCEB planned a workshop in Dhaka on best practices and case studies relevant to the targeted industries. Project selection will include gender criteria that gives women-owned businesses preferred status, all other project evaluation criteria being equal. CCEB will conduct additional walk through and investment grade audits, for the purpose of generate greater interest and preparing concrete recommendations for related project. Moreover, audit recipients from year 1 will be support by CCEB to achieve successful project implementation. CCEB will coordinate with other development agencies, namely the Japan International Cooperation Agency (JICA), the International Finance Corporation (IFC) and the Asian Development Bank (ADB), to avoid duplication and coordinate with their programs

With an eye toward pursuing more EE projects and larger penetration into target industrial sectors, CCEB conducted 50 walk through and 20 investment grade energy audits in year 2. CCEB engaged three local sub-contractors, Technology, Sodev Consult International Ltd., and Wellmake, through an open bid. Based on CCEB's selection criteria, the sub-contractors selected 50 plants for auditing. These plants were from three industrial sectors: textiles, frozen foods, and steel re-rolling. Upon CCEB's approval, the contracted firms carried out walk through energy audits in 25 textile, 13 frozen foods, and 12 steel re-rolling plants. Of the 50 plants, 20 aligned with CCEB's criteria for significant energy savings potential and high interest in implementing EEIOs. The sub-contractors completed investment grade audits in four textile, three frozen foods, and three steel re-rolling plants and submitted summary reports in August 2014. The respective plants then applied for CCEB Grants.

The investment grade audits found that 20 plants have a combined energy savings potential of 433,131 GJ annually, which is worth \$1.62 million. The investment required to implement the EEIOs is approximately \$3 million, and these EEIOs could achieve an annual carbon emissions reduction of 38,794 MT.

Management at several plants recognizes the savings potential and attractive return on

on cleaner production and EE.

investment of implementing the EEIOs recommended in the energy audit reports. CCEB, through its audit subcontractors, provided advisory support to the plants on EEIO implementation, as well as to prepare grants applications for Tranche 2.

Prior to the year 2 energy audits, CCEB maintained ongoing contact with the textile plants audited in year 1. Five plants expressed strong interest in implementing EEIOS and applied for CCEB Grants in Tranche 1.

CCEB conducted two sector-specific workshops for steel re-rolling plants and frozen food plants in June and September, respectively. The workshops shared the findings of the energy audits, as well as process-specific technical best practices in those industrial sectors. Representatives from several financial institutions attended both workshops. The workshops created a bridge between the plants' management, potential borrowers interested in implementing EEIOs, and financiers, while also making the banking community aware of the opportunity of EEIO financing.

#### 3.2 Financing Facilitation

In Year 1, CCEB approached a number of financial institutions—the International Finance Corporation (IFC), the Industrial Infrastructure Development Finance Company (IIDFC) and Industrial Development Leasing Company (IDLC) Finance Limited—to become familiar with the financing landscape for industrial EE. Year 2 interventions in this area will focus on catalyzing financial investments in industrial EE, through increased financial institution EE awareness, financing facilitation incentives, business and and advisory services/technical assistance. This activity intends to assist private sector companies to bring commercially viable EE projects to financial closure and support project replication and sustainability. CCEB plans to complete a financial assessment document focusing on the six financial institutions noted in USAID's Industrial EE Assessment Report.

In addition to assisting plants to identify potential EEIOs through energy audits, CCEB engaged financial institutions in EE financing with an eye towards establishing a sustainable EEIO practice for both entrepreneurs and financiers. To demonstrate EE opportunities to the banking community and explore EE financing, CCEB organized a workshop in April 2014 with representatives from 10 financial institutions. The workshop addressed the benefits, challenges and opportunities of EE financing, highlighting projects such as PFAN in South-East Asia and green banking practices in Bangladesh. A senior representative of the Bangladesh Central Bank discussed its green banking policy that allows borrowers to lend at a lower rate for specific projects. The representative recognized the promise of EE financing and mentioned that EE projects would benefit from being included in green banking policy.

CCEB subsequently advocated with central bank officials to include EE financing under the refinancing scheme of green banking policy. Eventually, the central bank revised the green banking policy adding 26 new items to the list of

refinancing products, including EE. As a result, EEIO adopters with an authentic energy audit report were able to claim loans of no more than 9% interest rate—significantly lower than existing commercial loans.

Apart from the workshops targeted to the banking community, CCEB invited financial institutions to two industrial sectors workshops. Based on their high level of interest in financing EE projects, CCEB chose nine financial institutions with which they will collaborate on EE. The institutions are IDLC Finance Limited, the Infrastructure Development Company (IDCOL), Mutual Trust Bank Limited (MTBL), Eastern Bank Limited (EBL), IIDFC, LankaBangla Finance Limited (LBFL), Janata Bank Limited (JBL), City Bank Limited (CBL) and United Finance Limited (ULCL).

CCEB prepared a loan template for EE loans in consultation with the participating financial institutions. The template aims to assist the financiers in developing viable EE projects and bringing them to financial closure.

CCEB prepared an assessment report on the participating nine financial institutions, which focuses on their ongoing activities and the opportunities and constraints regarding EE financing.

#### 3.3 Pilot Projects and Project Incentive Funds (Grants)

The potential industrial EE projects identified in year 1 will be primary candidates for grant funds. Grants would leverage private sector investment and take the form of engineering services or equipment procurement. CCEB envisions for these incentives to encourage early adopters of EE technologies and practices, without distorting the broader market. Incentives would target projects that are inherently commercially viable, replicable and have the potential to scale up following a successful demonstration project. During year 2, CCEB will establish and implement the grant fund application, processing, evaluation, and approval process. CCEB will seek USAID's involvement and approval for potential grants.

CCEB plans to award grants in several tranches over a typical project life. The first tranche of started with receiving grant applications in March 2014. CCEB previously prepared grant selection criteria along with a request for application (RFA) for grants. CCEB circulated the RFA to industrial facilities audited in year 1, as well as others, through email and advertisement on CCEB's website. Six textile plants applied for grants. CCEB's sub-contractors prepared grant applications. As part of this process, CCEB outlined a standard procedure for grant applications processing, evaluation and approval, during first grant award tranche. CCEB selected Five out of the six applicants for the grant award. The grant criteria included energy savings potential, reasonable payback period, SME oriented status, export business, and demonstrated interest for implementing EEIOs. CCEB submitted the five applications to USAID for final approval. After receiving USAID approval, at a grant agreement signing at the CCEB office on

September 11, 2014, CCEB awarded grantees with funds worth \$260,000. The grantees will implement 15 EEIOs and bear the \$1.07 million cost-share. These EEIOs have the potential to save 430,344 GJ of energy and reduce 18,000 MT carbon emissions annually.

Based on year 2 energy audit findings, nine plants from the textile, steel re-rolling and frozen foods sectors applied for CCEB Grants in Tranche 2. Three assigned sub-contractors followed-up with the plants and provided them technical assistance in preparing grant applications.

#### 3.4 Capacity Building for Energy Sector Professionals

CCEB conducted three training programs for Certified Energy Auditors (CEA) in year 1. This included two CEA courses in that had 57 participants and a train-the-trainer program for eight participants. 43 participants passed the CEA qualification exam; they are now fully certified to practice their profession Bangladesh. CCEB, in year 2, will support the promotion of these CEAs in energy auditing and consulting services, particularly for enterprises interested in sustainable EE projects. Over time, the plan is for these energy service providers to assume some of the contractor functions in EE project identification, development, financing facilitation. 2 CCEB will also promote the establishment of an AEE chapter in Bangladesh. Interested plants can seek out additional training and certification from CCEB and participate in the pilot program in the coming years. CCEB will post lists of accredited energy auditors and energy managers in CCEB's outreach platform, along with information on certification requirements. CCEB will also provide cooperation and support for the newly formed Sustainable and Renewable Energy Development Authority (SREDA).

CCEB adopted a plan to establish a local AEE chapter to strengthen capacity for energy professionals. In addition to creating a pool of 43 CEAs approved by AEE in year 1, CCEB provided full support to charter the new AEE chapter in year 2.

CCEB prepared a concept document and an implementation plan for the chapter. The concept document provides an argument on the benefits of establishing the chapter. The implementation plan outlines the course of activities the chapter will perform and the services it will offer to the local energy professionals.

As a pre-requisite to chapter establishment, CCEB formed a steering committee of 10 CEAs. A U.S. AEE member came to Bangladesh in February 2014 to establish the chapter. In subsequent AEE founding meetings, participants appointed an interim board comprising of the President, Vice-Presidents, General Secretary, and Treasurer. The interim board submitted a petition for founding a charter to the attending AEE official. He approved the petition and awarded the board with a certificate of admission for a chartered Bangladesh. chapter in With certification, the AEE Bangladesh chapter officially began operation on February 5, 2014. selected certification The chapter its administrator and certification board.

The chapter offers a variety of services to its members, including a platform for networking with other energy professionals and organizations, and professional development training such as the CEA and Certified Energy Manager CEM programs.

CCEB will continue to support and host the chapter. With CCEB support, the chapter participated in a trade fair organized ADB in May 2014. This provided the chapter access to a market where it can offer energy efficiency and capacity building services. CCEB promoted the chapter in its year 2 workshops.

CCEB conducted a survey and prepared a report on the effectiveness of their training. The survey report found that a majority of those surveyed believed the training benefitted their careers and that they could use the skills they attained in their everyday work. The participants successfully rated the planning and management of the training, the energy audit technical area, and the trainers. The report also highlighted a success story about a member of the chapter who received an award for the 2014 Young Energy Professional of the Year in the Asia region.

#### **Task 4: Demand Side Management Programs for Electric Utilities**

CCEB placed on hold activities related to DSM, pending the preparation and approval of a revised roadmap. CCEB mobilized Grayson Heffner, Deloitte's in-house DSM specialist, to lead in this activity. The revised roadmap is under discussion with USAID and CCEB expects its approval in early year 3.

#### Task 5: Market Analysis and Development for Improved Cookstoves

In year 1, CCEB conducted several activities to strengthen the Bangladesh cookstove sector, including organizing a Market Facilitation Platform where more than 200 participants attended. Participants included government officials, international manufacturers, entrepreneurs, NGOs, academia, the private sector, and Microfinance Financial Institutions (MFIs).

In year 2, CCEB worked with GOB, the Global Alliance for Clean Cookstoves (GACC), the Social Marketing Corporation (SMC) and other stakeholders to implement work plan activities, and continued engagement with international manufacturers to form linkages with entrepreneurs.

CCEB held continuous meetings with the World Bank and IDCOL to include new ICS technologies within their cookstove program. Likewise, CCEB encouraged GOB to include new cookstove technologies within their Country Action Plan (CAP). Expanding the ICS market involves mobilizing sources of financing such as Corporate Social Responsibility (CSR), Clean Development Mechanism (CDM), carbon finance for consumers and/or businesses engaged in supplying the market with new ICS. It requires strengthening businesses involved in the cookstove supply chain and better understanding consumer preferences in order to generate market demand. CCEB continued engaging GACC, donors, PFAN, potential carbon buyers, the private sector, and civil society to establish a thriving market for clean cooking solutions on both the supply and demand side.

Year 2 Work Plan	Year 2 Accomplishments
I Cai Z VVOIK Fiaii	Teal 2 Accomplishing

#### **5.1 Market Development**

CCEB will perform a market segmentation analysis for promoting new ICS designs. CCEB continues to promote a comprehensive market development effort based on consumer needs and preferences, willingness to pay, and barriers to purchasing and properly using ICS. CCEB will review the market strategy of the USAID-funded WASHplus project and work with international manufacturers, NGOs and entrepreneurs to increase the use of ICS.

In year 2, CCEB intends to develop promotional materials with local grassroots campaigners and implement campaigns on consumer education, TV and radio advertisements. including community well as outreach events, as information education communication/behavior change communication (IEC/BCC) materials. CCEB will analyze the fuel market to promote new ICS technologies. Market development activities geared towards females will be coordinated with health experts from USAID programs and surrounding regional expertise, to incorporate knowledge/lessons learned on behavior change and social marketing.

CCEB organized the Market Facilitation Platform and several regional workshops. CCEB conducted studies and distributed marketing materials to raise awareness on ICS.

CCEB worked closely with the GACC and the WASHplus project, which conducted a parallel market segmentation analysis.

The CCEB team conducted three regional workshops in Barisal, Faridpur, and Rajbari to present the results of the WASHPlus study and discuss ICS entrepreneurship opportunities. Local communities and NGOs gained awareness on ICS and certain NGOs are interested in exploring the business. The workshop also helped CCEB team and manufacturers identify local distribution channels, and motivate local MFIs to provide loan support for the ICS sector. The workshops had 161 attendees in total; participation was high. female Women comprised more than half of the attendees at Barisal.

CCEB prepared and printed ICS promotional materials including 10,000 posters and 20,000 leaflets, sharing them with manufacturers and local distributors.

The Market Facilitation Platform meeting took place on September 16, 2014 in Dhaka and CCEB jointly organized the event with GACC and GOB. The daylong event focused on ways to accelerate the pace of ICS market development. The Advisor to the Prime Minister for Energy and the USAID/Bangladesh Mission Director attended the inauguration of the event. Around 200 attendees participated, representing private enterprises involved in the cookstove market value-chain, government officials, financing institutions, and donor organizations. More than 25 panelists and guests spoke on topics such as ICS technology, access to finance, marketing, and testing. Five domestic and international stove manufacturers displayed their stoves in booths for Market Facilitation Platform participants.

The platform has led to several young engineers started to develop prototypes of their own ICS technology. Existing manufacturers have connected with distributors to market their products. The

manufacturer Muspana, for example, is now receiving a high volume of calls from the field in reference to the progress on their technology and their expected start date of production. S.S. Enterprise, also a manufacturer, received ICS orders from distributors present at the event.

#### 5.2 Enterprise Development and Access to Financing

CCEB will select entrepreneurs for enterprise development based on specific criteria and their record of accomplishment. Enterprise development will involve training and mentoring to enterprises in order to: develop business plans: volgme targeted and effective marketing strategies; conduct internal quality control; and, comply with carbon finance requirements. CCEB will also work with local manufacturers to define distribution channels for the promotion of new ICS products, the encouragement of new ICS entrepreneurs, and the promotion of new technologies in the marketplace.

In parallel to this activity, CCEB will establish, through an access to finance workshop and handbook, linkages between entrepreneurs and financial institutions on providing access to finance and to expand the production and distribution operations of entrepreneurs. Sources of financing may include carbon credits, commercial banks, small and medium enterprises, CSR funds, PFAN and other local financial institutions.

CCEB organized a workshop titled "Establishing Linkages Between Entrepreneurs and MFIs". Formal relationships resulted from the meeting between entrepreneurs and financial institutions. especially micro finance institutions. Two entrepreneurs received loans from Mutual Trust Bank for a combined 2.5 million BDT to be used for pursuing various clean energy initiatives, include establishing a local level ICS distribution channel. In addition, CCEB helped entrepreneurs apply to PFAN—at least two CCEB stakeholders were accepted to the PFAN pipeline thus far.

The **CCEB** team conducted business development workshops to help stakeholders prepare effective and sustainable business plans and increase ICS sales. Twenty-eight entrepreneurs from different parts Bangladesh attended the workshop. The entrepreneurs that attended were exposed to new ICS technologies. Ten entrepreneurs started ICS businesses in their communities, as a result. S.S Enterprise was able to sell approximately 800 stoves through the network of sales agents that was present, representing some of the first ICS in the country.

The assessment for potential CDM financing in Bangladesh, carried out by CCEB, resulted from a meeting with Future Carbon, the Department of the Environment, Greenway Grameen Infra Pvt Ltd, and other actors in the CDM space. CCEB quantified the opportunity for ICS entrepreneurs.

#### **5.3 Capacity Building for Financial Institutions**

CCEB endeavored to support capacity building of financial institutions lending to enterprises in the ICS value chain. CCEB will initiate and promote partnership activities, continuing the efforts of year 1. CCEB will define key performance metrics to track IDCOL's participation and achieve future collaboration that is transparent and accountable.

Financial institutions that attended CCEB's linkages between entrepreneurs and MFIs workshop wanted to learn about the risk profile of ICS sector investments. Soon after the workshop, the Bangladesh Central Bank included ICS as a 'green product' in their green banking, refinancing scheme, as mentioned

In parallel to this, CCEB will advocate with higher-level officials at other financial institutions to set up a self-sustainable loan program. Building on the results of the Market Facilitation Platform, CCEB will assist financial institutions in understanding ICS opportunities and promoting access to financing via an access to finance workshop and handbook, as described in 5.2.

above. CCEB helped local entrepreneurs receive loans to kick off their cookstove businesses. Two entrepreneurs received financing of at least BDT 25 lakh. Additional financial institutions are taking initiatives for financing in this sector, which could further promote ICS.

#### **5.4 Standards and Protocols**

During year 2, CCEB will continue to support a national testing center to promote standards and protocols for new ICS design, installation, testing and performance monitoring. CCEB will participate in identifying a capable and experienced organization to act as Cookstove Testing Center/Center of Excellence. The center will provide technical information such as ICS technical training, current benchmarks, and ways to access CDM/carbon finance.

coordination with GACC, CCEB held stakeholder interviews with several prospective governmental organizations and NGOs, and each has the capacity to support testing activities. GACC and CCEB determined that the Bangladesh Council of Scientific and Industrial Research (BCSIR) is the appropriate target for testing center funding, capacity building, and equipment. GACC drafted a grant application for BCSIR under the leadership of Ranyee Chiang, Director of Standards, Technology, and Fuels. CCEB will continue to provide direct support to GACC's design of a grant application and BCSIR's response to this application in year 3.

#### 5.5 Coordination

The CCEB team organized the Market Facilitation Platform in year 1, as mentioned above. One of the major outcomes was the inclusion of new ICS technologies in CAP. During year 2, CCEB will promote close cooperation with key stakeholders across the ICS sector to understand the current market conditions, provide technical guidance, and update relevant parties on the progress in implementing USAID program activities. CCEB will ensure that program activities are closely coordinated with other programs supporting GACC and will develop and issue a stakeholder map illustrating cookstove sales and installation opportunities. CCEB signed an LOC with SS Enterprises and Greenways stoves in year 1. During year 2, the team will develop and sign additional **LOCs** with key stakeholder organizations to ensure coordination and leverage their relationships. CCEB will also coordinate with the Household Energy Platform led by the Power Division, and campaign to reduce import taxes on new ICS.

CCEB's stakeholder map provides the marketplace a clear picture of activities carried out by each stakeholder. It also allowed CCEB to identify possible areas of collaboration.

CCEB signed LOCs with six stakeholders in year 2, including SMC, Grameen Greenway Infra Private Limited, Envirofit, IDCOL, Rahimafrooz and GACC. According to the LOCs, CCEB will provide technical assistance to link manufacturers and distributors, develop business plans, provide training, prepare communication and promotional materials, and perform other market-based activities. The stakeholders agreed to make their best efforts to actively supply, distribute, sell, and establish a market for ICS.

The CCEB team conducted several stakeholder meetings to increase coordination and cooperation. Meeting participants included donors, NGOs, ICS manufactures, distributors and financiers—specifically, C-Quest, GACC, the Power Division, the United Nations Children's Fund (UNICEF), international development enterprises, SMC, SS Enterprise, Village Education Resource Center, IDCOL, 5 Star

Stove, Rahimafrooz, the Palli Karma Sahayak	
Foundation (PKSF), and BRAC NRB Bank.	

#### 6.0 OTHER

CCEB carried out the following ancillary activities during year 2.

#### 6.1 Environmental Monitoring and Mitigation Plan

As part of its annual work plan process, the Deloitte team reviewed – and will continue to review – all ongoing and planned activities under this contract to determine if they are within the scope of the approved Regulation 216 environmental documentation. The Deloitte team will collaborate with the USAID Agreement Officer's Representative (AOR) and Mission Environmental Officer (MEO) or Bureau Environmental Officer (BEO), as appropriate.

#### **ACCOMPLISHMENTS THIS YEAR:**

CCEB ensured programmatic compliance with Regulation 216. Environmental compliance requirements are minimal as the program provides primarily technical advisory services and training.

#### 6.2 Gender

CCEB requires continued practice of gender sensitive programming in clean energy development. Specific interventions address the barriers women face with respect to energy technologies and services.

#### **ACCOMPLISHMENTS THIS YEAR:**

CCEB incorporated previously identified gender related mainstreaming activities for each task. Under the regulatory task, the CCEB implementer will consider gender in the design and implementation of public outreach and consumer groups' capacity building efforts, e.g. tailoring outreach events towards stakeholders in a gender-specific way, and providing technical support for female-based civil society organizations. The EE components of this program will target many industries that not only employ a high ratio of female workers, but also those that are women-owned. The market development of ICS will consider the needs of female cookstove users and will support the scale-up of stove models that meet the identified needs and have benefits for women users. Almost 20% of all participants attending CCEB-supported training in Year 2 were female (85 of 504).

#### **6.3 CCEB Website**

CCEB maintains a project website and updates it regularly with announcements and deliverables. CCEB also created Facebook and LinkedIn pages to reach a larger audience with project work.

#### 6.4 Performance Monitoring and Evaluation Plan (PMEP)

In year 2, the CCEB M&E team conducted meetings with all task leaders and responsible persons in order to revise the indicator target for FY14. In addition, CCEB held one-on-one meetings to finalize indicator targets. The inputs from all task team members were included in the PMEP and subsequently, CCEB revised and updated the PMEP based on the Year 2 Work Plan. CCEB then submitted the PMEP to USAID for approval; USAID approved. CCEB revised and updated the PMEP database in order to capture the indicator data.

Through the year, CCEB collected indicator data and information from various sources including source documents (e.g., training reports and LOCs) and interviews with project counterparts and other stakeholders. CCEB recorded the data in the PMEP database to analyze and then report it to

USAID. Simultaneously, CCEB held one-on-one meetings with task leaders regarding the progress on indicators.

USAID and ACME (a contractor hired by USAID) conducted a Data Quality Assessment (DQA) in year 2. On September 11, 2014, CCEB presented the program to ACME and discussed the results of the Year 1 DQA. On September 22, 2014, ACME conducted a detailed meeting with CCEB to discuss indicator targets, processes, and achievements. The CCEB COP and M&E Specialist attended the meeting and presented the M&E tools and database that captured indicator data and information.

CCEB also attended a meeting with USAID on the CCEB EMMP and identified areas, specifically on implementing the EE industrial project, where it will pay particular attention. The CCEB M&E Specialist received Arc GIS Online training that USAID organized on March 23, 2014. Lastly, the CCEB M&E Specialist attended a "GIS and Remote Sensing" workshop held at the American Embassy Employees Association on September 24, 2014.

#### 6.5 Year 2 Work Plan

USAID approved CCEB's Year 2 Work Plan on February 3, 2014. To achieve progress against activities and deliverables outlined in the Work Plan, CCEB organized monthly progress review meetings in the presence of USAID. The CCEB COP facilitated the meetings. At the meetings the CCEB task leaders presented their progress, and the COR gave his feedback and guidance on how to more effectively implement the program and maximize results.

CCEB initiated preparation of the Year 3 Work Plan in September 2014, and USAID provided its approval in November 2014.

#### Performance Indicator Results Against Targets

The CCEB project actively tracks performance indicator results against targets and a summary is presented as follows.

			PERFOR	RMANCE II	NDICATOR	VALUES					
Baseline	Baseline	Program Ye	or Actual		Broar	am Year Ta	rant		Total		
Year	Value	Frogram re	ai Actuai		Flogi		iotai				
2012	0	FY 13 Actual	FY 14 Actual	FY 13 Target	FY 14 Target	FY 15 Target	FY 16 Target	FY 17 Target	Total Actual	Total Target	
Ta	arget	0	749	0	108,211	104,259	138,759	160,344	749	511,573	
				Disaggrega	ated Target	s					
Textiles	EE Projects	0	0	0	5,411	15,307	34,566	46,603	-	101,887	
Steel Re-roll	ing EE Projects	0	0	0	-	11,548	26,516	36,064	-	74,128	
Jute El	Projects	0	0	0	-	249	465	465	-	1,179	
Frozen Foo	ds EE Projects	0	0	0	-	55	112	112	-	279	
Cookstoves Installed		0	749	0	102,800	77,100	77,100	77,100	749	334,100	
A	ctual				R	acking Systen	n				
			THIS SHE	ET LAST U	PDATED (	ON: 09/30/1	14				

			PERFOR	RMANCE II	NDICATOR	R VALUES					
Baseline	Baseline								Total		
Year	Value	Program Ye	ear Actual		Progr	am Year Ta	ırget				
2012	0	FY 13	FY 14	FY 13	FY 14	FY 15	FY 16	FY 17	Total	Total	
2012	U	Actual	Actual	Target	Target	Target	Target	Target	Actual	Target	
Tai	rget	2	14	0	13	5	24	0	16	42	
				Disaggrega	ated Target	s			_		
Govern	nmental	2	2	0	1	2	1	0	4	4	
Private	esector	0	3	0	3	0	20	0	3	23	
Uti	ility	0	2	0	2	1	1	0	2	4	
Other		0	7	0	7	2	2	0	7	11	
Ac	tual				F	Recorded in C	CEB Data Tra	acking Syster	n		

			PERFO	RMANCE II	NDICATOR	R VALUES						
Baseline Year	Baseline Value	Program Ye	ear Actual		Program Year Target					Total		
2012	0	FY 13 Actual	FY 14 Actual	FY 13 Target	FY 14 Target	FY 15 Target	FY 16 Target	FY 17 Target	Total Actual	Total Target		
Ta	rget	57	504	56	425	1,076	1,040	1,020	561	3,617		
				Disaggrega	ated Target	s						
Gover	nmental	6	52	36	25	16	0	0	58	77		
Privat	e sector	37	107	20	60	40	20	20	144	160		
Ut	ility	6	0	0	20	20	20	0	6	60		
Aca	demic	6	1	0	0	600	600	600	7	1,800		
Entrepre	neur/Other	2	344	0	320	400	400	400	346	1,520		
Fei	male	4	85	20	149	377	364	357	89	1,266		
M	ale	53	419	36	276	699	676	663	472	2,35		
•				•		•	•	•	•			
Ac	tual			-	F	Recorded in C	CEB Data Tra	acking Syster	n			

Indicator 4: Number of laws, policies, strategies, plans, agreements, or regulations addressing clean energy related measures officially proposed, adopted, or implemented as a result of USG assistance PERFORMANCE INDICATOR VALUES Baseline Baseline Program Year Actual **Program Year Target** Value Year FY 13 FY 14 FY 13 FY 14 FY 15 FY 16 FY 17 Total Total Actual Target Target Target Target Target Target Disaggregated Targets Task 1 Regulations, Policies 0 Task 2 Plans, Strategies, Policies Recorded in CCEB Data Tracking System Actual THIS SHEET LAST UPDATED ON: 09/30/14

Indicator 5: R	ating increase in	n organizatio				del scoreca				
Baseline	Baseline	Program Y		KWANGE		ram Year Ta			To	otal
Year	Value TBD	FY 13	FY 14	FY 13	FY 14	FY 15	FY 16	FY 17	Total	Total
2012 To	arget	Actual N/A	Actual 11%	Target N/A	Target 20%	Target 30%	Target 45%	Target 55%	Actual	Target 55%
	ctual	IN/A	1170	IN/A		Recorded in C			n	55%
			THIS SHE	ET LAST U		ON: 09/30/		<u> </u>		
Indicator 6: A	mount of energy	saved due t					ce			
Baseline	Baseline		PERFU	RMANCE I	INDICALO	K VALUES				
Year	Value	Program Y		=>/ 12		ram Year Ta				otal
2012	0	FY 13 Actual	FY 14 Actual	FY 13 Target	FY 14 Target	FY 15 Target	FY 16 Target	FY 17 Target	Total Actual	Total Target
Ta	rget	0				_	_	1,479,859	0	3,154,168
	<b>.</b>	-			ated Targe	,	1,000,101	1, 11 0,000		5,151,155
	EE Projects	0	0		,	272,364	615,051	829,230	-	1,812,585
	ing EE Projects E Projects	0	0			205,485 4,423	471,811 8,269	641,709 8,269	-	1,319,005 20,962
	ds EE Projects	0	0			317	650	650	-	1,617
Ac	ctual					Recorded in C		acking Syster	m	
	i		THIS SHE	ET LAST (	JPDATED	ON: 09/30/	14			
Indicator 7: N	umber of clean	onoray initia	tivos implom	ontod						
mulcator 7: N	umber of clean	energy mina			NDICATO	R VALUES				
Baseline	Baseline			KINATOL					_	_
Year	Value	Program Y		EV 40	_	ram Year Ta	_	EV 47		otal
2012	0	FY 13 Actual	FY 14 Actual	FY 13 Target	FY 14 Target	FY 15 Target	FY 16 Target	FY 17 Target	Total Actual	Total Target
Та	arget	1	15		12	79	121	67	16	280
F	-t Dii				ated Targe	ts				
	ctor Planning rial Projects		7		1 4	72	114	67	7	257
	M Programs		2			2	2	0	2	6
	s Sector Dev	1	5	1		5	5	0	6	16
Ac	ctual					Recorded in C		acking Syster	m	
	İ		THIS SHE	ET LAST (	JPDATED	ON: 09/30/	14			
	mount of invest	ment leveraç	ged in U.S. d	ollars, from	private and	d public sou	rces, for cl	imate chan	ge as a resu	ılt of USG
assistance			DEDEO	RMANCE	NDIC ATO	R VALUES				
Baseline	Baseline			MANCE						
Year	Value	Program Y	ear Actual		Prog	ram Year Ta	arget		To	otal
2012	0	FY 13 Actual	FY 14 Actual	FY 13 Target	FY 14 Target	FY 15 Target	FY 16 Target	FY 17 Target	Total Actual	Total Target
Tarq	et (\$M)	\$0.00	\$1.41	\$0.00		\$13.03	\$11.87	\$10.50	\$1.41	\$47.27
	,			Disaggreg	ated Targe	ts				
	or Funds (\$M)	\$0.00	\$0.19			\$1.00	\$0.50	\$0.00	\$0.19	\$2.00
Private Sec	tor Funds (\$M)	\$0.00	\$1.22	\$0.00	\$11.37	\$12.03	\$11.37	\$10.50	\$1.22	\$45.27
Δι	ctual				,	Recorded in C	CEB Data Tr	acking System	m	
7			THIS SHE	ET LAST I		ON: 09/30/		5 5,5101		
Indicator 9: N	umber of improv	ed cookstov	es installed a	asa resulto	of USG assis	tance				
			PERFO	RMANCE	NDICATO	R VALUES				
Baseline	Baseline	i -							i	
Year	Value	Program Y	ear Actual		Prog	ram Year Ta	arget		To	otal
		FY 13 Actual	FY 14 Actual	FY 13 Target	Prog FY 14 Target	ram Year Ta FY 15 Target	FY 16 Target	FY 17 Target	Total Actual	Total Target

			PERFO	RMANCE II	NDICATOR	R VALUES					
Baseline	Baseline	Program Ye	or Actual		Broar	am Year Ta	rant		T-1-1		
Year	Value	Program re	ear Actual		Frogr		Total				
2012		FY 13	FY 14	FY 13	FY 14	FY 15	FY 16	FY 17	Total	Total	
2012	0	Actual	Actual	Target	Target	Target	Target	Target	Actual	Target	
Та	rget	0	729	0	100,000	75,000	75,000	75,000	729	325,000	
		-	Disa	ggregated 1	Targets by F	Region					
Т	BD										
Т	BD									(	
T	BD									(	
T	BD									(	
Actual Recorded in CCEB Data Tracking System											